



## Windows Workstation Patching Changes

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### Workstation Log Off

All DAS employees and DAS workstation customers with Windows workstations will log off at the end of each day, turn their monitors off, but will **leave their workstation powered on**.

This change will allow ITE to patch during off hours and maintain a more customer focused environment without the interruptions and inconveniences that now occur due to the necessity of patching, and often restarting, all Windows workstations.

When a reboot is necessary after a patch installation, the reboot will occur on Sunday between 3:00-6:00am, except in emergency situations or when a system has not been connected to the state network for an extended period of time.

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## Directions for Logging Off without shutting down



1. Instead of selecting “Shut Down”, select “Log Off” when you are ready to leave.
2. Shut off your monitor after the system has logged you off.
3. When you return to your workstation and are ready to begin working again:
  - a. Turn on your monitor
  - b. Move your mouse a little
  - c. Log on to your account when you are ready

If you prefer the <Ctrl><Alt><Del> keys to get the Shutdown/Log off window, simply choose the “Log Off...” button from the Windows Security window. Then turn your monitor off.

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## Why the keep workstation on after-hours?

It is more both more cost effective and helpful to personnel to perform the system restart after normal work hours. Some patches require a system be restarted to work, other patches don't. The issue that most personnel are challenged with is restarting their computer after a patch has been installed. Many delay the restart until it is forced, and then in can impact whatever they are currently working on with their workstation. With our improved SMS system (the tool ITE uses to update and patch Windows workstations) patches can be installed as soon as patch testing is completed and the patch has been approved. In fact, this happens all the time without affecting users because the patching happens behind the scenes, without interfering with work in-progress on the workstation.

By leaving workstations on, the mandatory restart can occur when most personnel are not at work. This restart will also occur only if the system hasn't been restarted since the last “restart-required” patch had been installed. By restarting a workstation during a service window (Sunday, 3:00-6:00 am), personnel will usually not even notice that a patch or an update has been installed and that their system has been rebooted. By keeping

workstations on after-hours, systems can also be updated, patched and restarted on weeknights for emergency patch installations.

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### **What is the cost of keeping workstations on the extra time?**

A cost assessment for leaving systems on was conducted by ITE staff. The results were reviewed by GSE personnel. The recommendation to keep workstations on all day was approved because of the low financial cost and the likely higher personnel and customer satisfaction with workstation service. The cost projections were as follows:

- 686 DAS/DAS customer systems
- 123 hours per week (15 hours per weekday, 48 hours per weekend)
- Cost based on Hewlett Packard power-use documentation and kilowatt/hour cost
  - 3 watts/hour for a workstation or monitor in sleep mode
  - \$.045 kilowatts/hour cost
- Cost per year to leave all workstations and monitors on after-hours - **\$1,093.54**
- Cost per year to leave all workstations on after hours - **\$546.77**

The potential loss of personnel work-time during the day for a mandatory reboot can surpass this cost. The cost of a **single** security incident involving an unpatched workstation could easily surpass this as well.

Since leaving the monitor on after-hours serves no purpose and does cost a little, personnel should continue to turn it off when they leave.

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### **What happens if I turn my workstation off every night anyway?**

If a patch is pushed out while your workstation is off **and** a forced restart is required, soon after you power-on your computer it will get patched and then restarted. (You'll get a 5-minute warning.) If there is more than one patch that requires a restart (and it has happened before), you may have to wait through a few start-patch-restart cycles before you can work on your computer.

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### **Laptops**

If you have Windows laptop, it will need to get patched too. As in the previous question, if you connect your laptop to the network after a mandatory restart has occurred, your laptop will immediately be restarted. If the laptop has been patched with a mandatory-restart-patch, the patch will be installed, and then the laptop will be restarted, no matter what you happen to be doing. You'll receive a 5-minute warning, which would be an excellent time to quickly save whatever document you're working on, and then the restart will occur.

If you don't connect your state laptop to the network very often, it would be a good idea to either connect it at least once a week (which you should do for anti-virus updates anyway), or plan for the forced patch installation and system restart whenever you do connect after a long period of not doing so.

## **Emergency Patches**

In the event that an Emergency Patch and Restart is needed, it will be done as quickly and as efficiently as possible. An email notice will be sent out to all DAS personnel and DAS workstation customers as soon as possible, but in an extreme situation this notice may be after the restart has occurred. This situation has never occurred yet, but with ongoing vulnerabilities and the potential for infection from a quickly-spreading worm, the need may someday occur.

## **Questions**

If you have any questions regarding the patch process or keeping your workstation on, please send them to [SecurityAwareness@iowa.gov](mailto:SecurityAwareness@iowa.gov), and we'll answer them either directly or by updating this document.

Thank you,

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